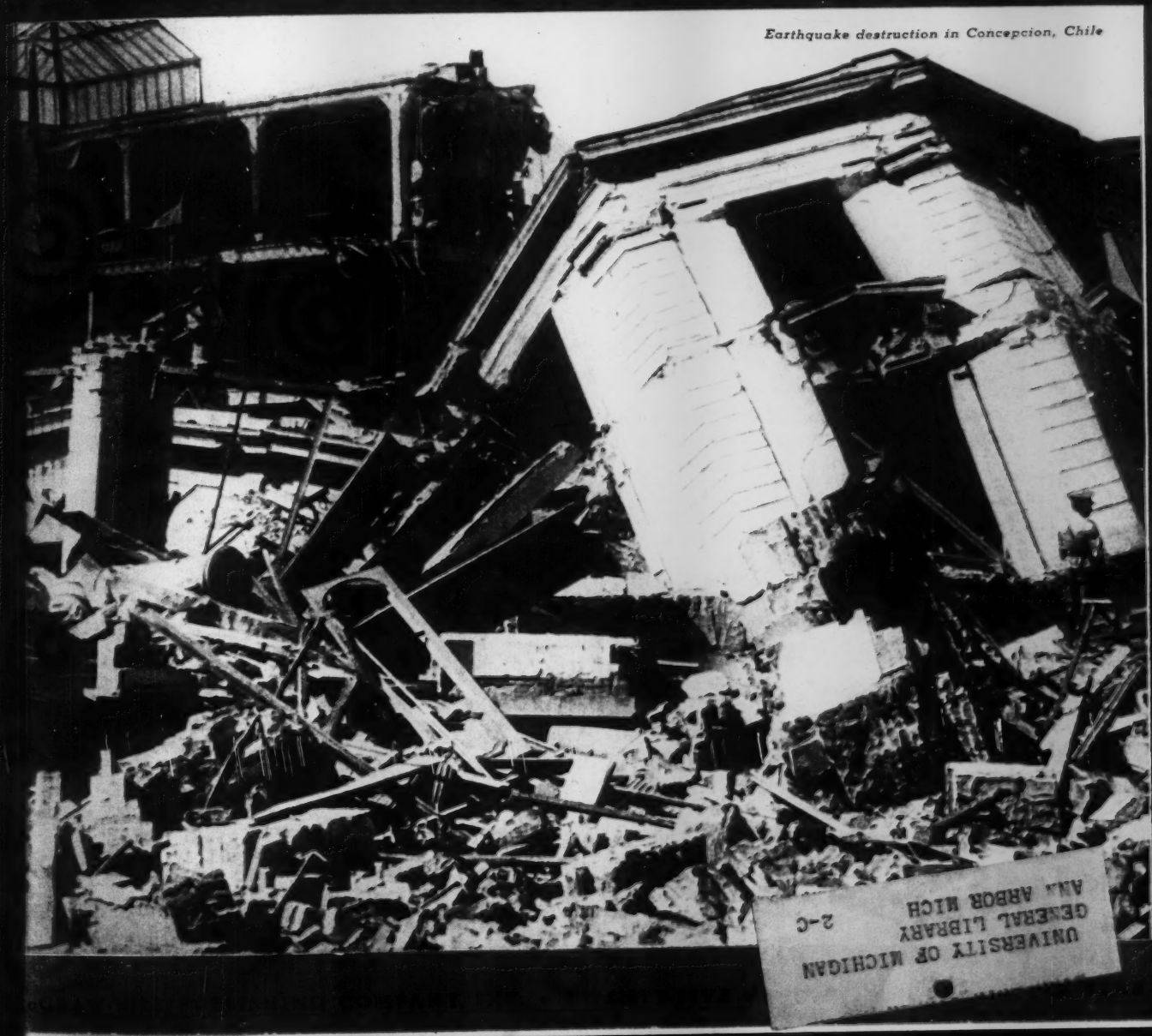
NEWS

FEBRUARY 9, 1939



Earthquake destruction in Concepcion, Chile

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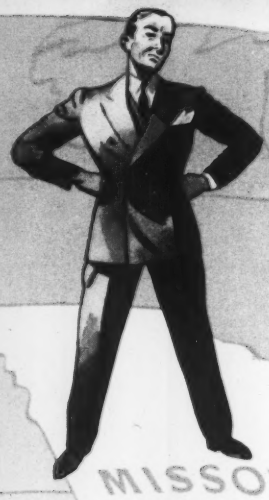

FACTS for the engineer who is "FROM MISSOURI"

PIPE, SHEETS, PLATES and many other forms of metal, like operating equipment, may now be bought on known performance—thanks to the many records established by Toncan Copper Molybdenum Iron.

A civil engineer used Toncan Iron pipe and sheets in a Virginia railroad viaduct in 1909. It is still in use and on any slide rule this figures 30 years of not-so-easy service.

Because troughs and conductors of this material on an eastern hosiery mill lasted twice as long as those previously tried, the plant engineer used Toncan Iron for all dye-room equipment.

Utility engineers have tried Toncan Iron in blow-off lines and buried it in cinder beds and, because of its life in these severe services, now use quantities of it every year to carry cables under streams, over bridges and through marshy land.

Facts such as these make you ask—"What is this unusual material?"

Toncan Iron thirty years ago was a highly refined open-hearth iron—fine insurance of long life. To this base metal has been added copper and molybdenum, making an alloy iron having the highest rust-resistance among ferrous metals in its price class—a metal that will save money for the user over a long period of years and worthy of the confidence of every engineer who must be shown the facts before he writes it into specifications.

Factual literature, suggesting hundreds of uses, is yours for the asking.

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—that grows old slowly

ENGINEERING NEWS-RECORD

NEWS

Volume 122 FEBRUARY 9, 1939 Number 16

NOTEBOOK NEWS

Quick Surveys of Construction Events

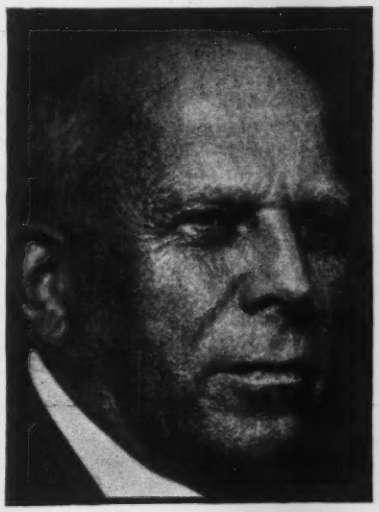
▶ Views of the Chilean earthquake reproduced on p. 4 indicate that no earthquake of such a destructive nature has happened in that region for many years, else the old churches and other precarious types of construction wrecked in the January quake would not have been standing. Following a lesser quake in 1922, Bailey Willis, earthquake authority, recommended extensive reconstruction to avoid just what happened last month.

▶ The old bridge *vs* tunnel fight has been revived at New York, this time with respect to a crossing between the lower end of Manhattan and Brooklyn. This week the Tunnel Authority got permission from the War Department to build its tunnel, and as it already has authority from the legislature it is two up on the bridge proponents. What both sides lack is money with which to build either a bridge or a tunnel.

▶ Consulting engineers gasped last week when they read in the papers that a new study of professional income put them far in the lead of other professions. But a careful study of the report shows that the high figure given was a 1929 figure from which point engineers' income took a steep dive, also that lawyer incomes were not included in the 1929 figures used in the study. See p. 3.

▶ Ending of the war between the TVA and the electric utilities of the Southeast is expected to have a wide effect in stimulating the construction of new facilities by other utility companies in many other parts of the country.

Cover picture from Acme



NATHAN C. GROVER

retires as head of Water Resources Branch of the Geological Survey (see p. 7).

TVA Agrees to Purchase Tennessee Utility

A tentative agreement has been reached between the TVA directorate and the Commonwealth & Southern Corp. under which TVA and Tennessee municipalities together will purchase all Tennessee electrical properties of the corporation for a price of $78,600,000. Non-electrical facilities of Commonwealth & Southern are not included.

The agreement is the result of negotiations which have been continued since last March, at an early stage of which the utility was asking $85,000,000 for its properties and TVA was offering $55,000,000. The price agreed upon, it is reported, represents a number of concessions by TVA, including recognition of common stock values and going business value as well as investment not strictly for purchase of operating properties.

Pennsylvania Opposes Flood Program

State water secretary attacks new federal flood control methods

It appeared likely that a third state administration might join Vermont and Oklahoma in opposing the flood control methods adopted in the 1938 act—under which the federal government pays the entire cost of reservoir projects, acquires full ownership, and need not obtain the consent of the states—when Pennsylvania Secretary of Forests and Waters, G. A. Stewart expressed strong opposition to permitting the federal government to attempt flood control on this basis.

(Continued on p. 5)

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Lower Rent Expected On New York Housing

Estimates of the rentals which will have to be charged at New York City's Red Hook and Queensbridge housing projects, now under construction, were again revised downward last week as a result of operating experience last year on the Williamsburg and Harlem River Houses projects. These latter are PWA-built projects owned by the U. S. Housing Authority and operated under lease by the New York City Housing Authority.

Chairman Rheinstein of the New York authority released figures indicating that the new projects were operated last year at a saving of 28 per cent over the budget originally adopted by USHA. Application of the same management methods to the two projects now under construction will permit an average rental of $4.60 per room per month instead of the $5 announced last summer, Rheinstein expects. The average rental charged at Williamsburg and Harlem Houses is $7.10 per room.

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Continent-Wide Road System Urged

Pan American Highway Congress studies financing of a South American road system

Report by John Abbink

A plan for cooperative financing by South American nations of a continental system of highways was approved in principle by the Third Pan American Highway Congress at its meeting in Santiago, Chile, Jan. 11–19. Proposed by the delegates from Mexico, the plan contemplates cooperative financing of a Pan American system of highways. The plan is based on recommendations of the financial committee of the Lima Pan American Conference held a few weeks ago.

Formulation of the details of the plan was deferred, but it was arranged to hold a special conference of technical delegates at Panama within six months to report on the best routes for a Pan American system of trunk highways, particularly at frontier crossings, and to draw up general specifications for geometrical design Such action was called for in the Pan American Highway Convention but has been delayed by diplomatic procedure.

Highway revenue

The Congress recommended, on motion of the Argentine delegation, that import duties on automobiles be abolished and the consequent reduction in tariff revenues be compensated by an increase in the gas tax. Only enough money would be taken from the gas tax revenues to compensate for the tariff losses, and the increased revenues which are expected from the increased use of automobiles would be devoted to highway construction. At the same time the Congress recommended that there be no diversion of motor vehicle income from highway revenues to general purposes.

It was decided to hold the next Pan American Highway Congress in Mexico City, the date to be determined by the Mexican government.

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Asphalt Technologists Meet in Chicago

Soil stabilization, aggregate gradation, new equipment maintenance, a new machine for testing compactibility, and surface visibility experiments were topics discussed at the meeting of the Association of Asphalt Paving Technologists in Chicago Jan. 31-Feb. 1. Newly elected officers are: President, E. F. Kelley; vice presidents, Gene Abson and C. L. McKesson; secretary-treasurer, W. J. Emmons.

Two soil stabilization papers covered experience with cut-back asphalts and emulsified asphalt. J. C. Roediger and E. W. Klinger, Standard Oil Co. of New Jersey, presented the first paper, and R. R. Thurston and Bruce Weetman, The Texas Co. outlined results using emulsified asphalt.

Roland Vohac, Barber Asphalt Corp., discussed a procedure for selecting the most suitable type of aggregates for asphalt mixtures using an isometric design chart first described in 1936. The paper presented improvements in technique and outline of design limits.

J. T. Pauls and J. F. Goode, U. S. Bureau of Public Roads, described a new vibratory machine for determining the compactibility of aggregates.

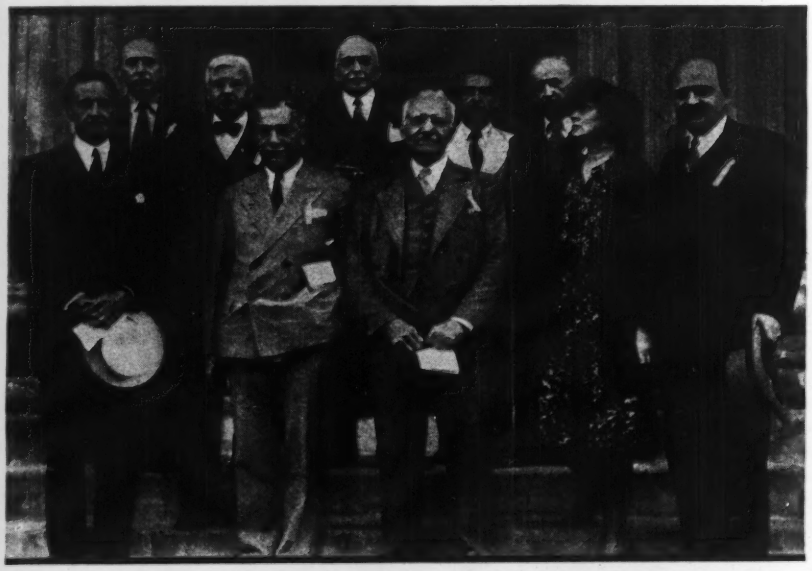
C. A. B. Halvorson, General Electric Co., described the experiments made at Lynn, Mass., in an attempt to increase visibility of asphalt pavements at night. Granite chips, which increased the visibility three times reduced the cost of lighting materially. The problem is to get a large enough aggregate so that it will not be drowned out in wet weather.

Multi-purpose Dams Opposed in Texas

Whether the Lower Colorado River Authority of Texas was negligent in its operation of the Buchanan Dam during the Colorado River flood of last July depends on whether the authority is primarily interested in flood control or power generation, a committee appointed by the state legislature to investigate the subject reported Jan. 31. The committee said that the LCRA had been negligent in not lowering the reservoir level before the flood if it was the policy of the authority to devote primary attention to flood control.

The committee held that it was impossible for a dam to serve both flood control and power generation with any degree of efficiency if the purposes are considered of equal importance. "We do not deem it within the province of this committee to make specific recommendations as to what that policy should be," the report said.

A bill now before the state legislature would require the Buchanan reservoir to be kept at a low level.



UNITED STATES DELEGATION AT HIGHWAY CONGRESS

SOME OF THE VISITORS to the Third Pan American Highway Congress from the United States are shown in Santiago. Left to right, they are: (*first row*) Norman Armour, United States Ambassador to Chile, chairman of the delegation; John Abbink, president of Business Publishers International Corp.; W. R. Manning, of the Department of State, adviser to the delegation; Mrs. John V. N. Philip, wife of a member of the delegation; George F. Bauer of the Automobile Manufacturer Association, an adviser; (*second row*) Stephen James, director of the Pan American Confederation for Highway Education, an adviser; Edwin W. James of the U. S. Bureau of Public Roads, delegation member; J. V. N. Philip; and two Chilean translators.

Members of the delegation not pictured were Robert H. Baldock, chief engineer of the Oregon state highway department; B. M. Duncan, general manager and chief engineer of the Florida Overseas Highway.

Cottage Housing Planned For New York

The first USHA public housing project to be composed of single-family dwellings is provided for in a $5,000,000 project for New York City which has been tentatively approved by the U. S. Housing Authority. Mayor LaGuardia, on Feb. 1, announced plans for the project, which is expected to house about 600 families on Staten Island, stating at the same time that the USHA had approved two other projects in Manhattan and Queens to cost about $15,000,000.

Commenting on the single family project next day, USHA Administrator Straus pointed out that its feasibility resulted from a combination of low land-cost and water transportation. The cheap land available on Staten Island makes it possible to build single-family dwellings; but ordinarily, he said, projects built on cheap outlying land are hindered by the difficulty of providing transportation into the city. In this case, it will be possible to provide cheap ferry transportation directly from the site of the project to lower Manhattan.

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North Carolina Surveyors Form Organization

A new organization, the North Carolina Society of Surveyors, was formed at Raleigh, Feb. 1, at the conclusion of a three day institute for surveyors held at North Carolina State College as a part of Engineers' Week there. F. C. Morton has been elected first president of the society.

Intended to advance the theory and practice of surveying and to maintain professional standards, the society is open to "any man of good standing in the community who is qualified by law or by surveying experience to practice surveying." Annual dues have been limited to a dollar.

Other officers are Grady S. Harrell, vice president, and C. L. Mann, secretary-treasurer.

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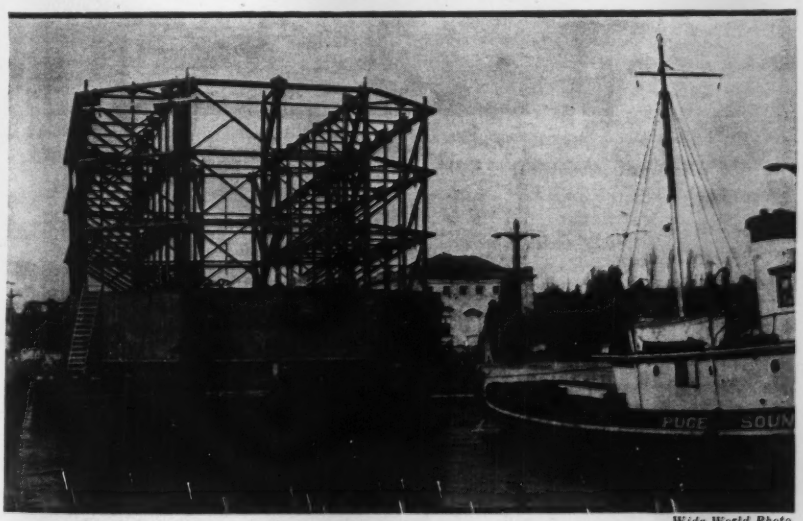
Sharp Fall in Income Found for Consultants

Average net incomes of consulting engineers fell from $11,800 in 1929 to $3,100, in 1932, according to a study of the National Bureau of Economic Research, New York, entitled "Income from Independent Professional Practice, 1929-1936." The study covers physicians, dentists, lawyers, certified public accountants and consulting engineers, but it is misleading in that the figures for engineers cover only the years 1929 to 1932, while those for lawyers are from 1932 to 1936.

By 1932, when the lawyers came into the picture, the average for consulting engineers was $2,200 below the lawyers and was on a par with physicians. Only dentists were lower in that year, being $2,700. Median figures for 1929 place engineers at $7,900, accountants at $6,100, physicians at $4,200 and dentists at $4,100.



Wide World Photo

TACOMA BRIDGE CAISSON GOES FOR A VOYAGE

DESTINED to form a pier foundation for the Narrows Bridge at Tacoma, this 900-ton caisson is taking a side trip into Lake Washington where work on it will be completed. The caisson is being shown passing through the Ballard Locks which connect Lake Washington with Puget Sound. The big structure, 120 ft. long, 66 ft. wide and 50 ft. high, will then be towed back through the locks into the Sound and on to the Point Defiance Narrows at Tacoma.

LABOR NOTES

SCARCITY of competent form builders for concrete construction has led to establishment of a special training course in Jacksonville, Fla. Begun early this month at the city vocational school, the course is open to carpenters. Instruction will be given in forming, bracing and supporting slabs, beams and columns, methods of reinforcing, and construction of arches. The course, which will be given one night a week for thirty-six weeks, is being taught by Joseph Meyers, building inspector of the city.

EMPLOYEES of the city of Cincinnati, members of the Municipal Employees Association, have filed suit in common pleas court seeking to compel the city to pay them back wages representing the difference between the rate they received and that fixed by the state department of industrial relations under the state's prevailing-wage law. They also ask 100 per cent punitive damage. The amounts claimed total about $680,000, some claims dating back to 1935. The same group some months ago tried unsuccessfully to have the Ohio Supreme Court compel the city to conform to the prevailing wage law requirements.

BRIDGE and structural iron workers have gone on strike in San Francisco, Fresno, and several northern California cities, seeking a wage increase of a dollar a day which would bring the rate to $11.

ON THE RUBY DAM project of the Seattle lighting department, however, fifteen machinists, blacksmiths and mechanics, on strike since Jan. 6, returned to work last week after they had been granted wage increases of 25 cents an hour by the General-Shea-Columbia Construction Co., contractors on the dam.

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Florida Architects Certify Buildings

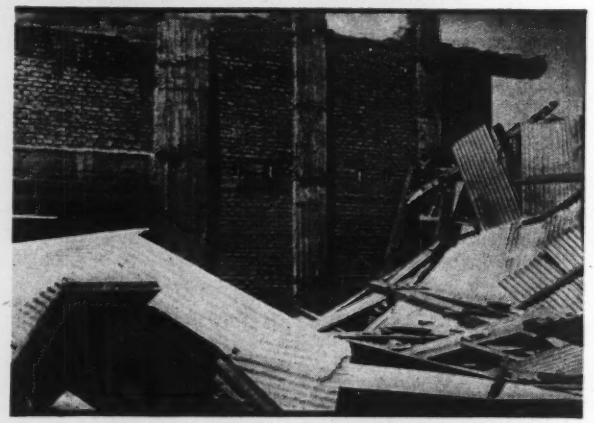
A recently organized group of architects in Coral Gables, Fla., has instituted a plan to issue "certificates of construction" to buildings built under supervision of an architect who is a member of the association.

Where a building so supervised is under construction, the owner is permitted to display a sign reading "Certified Construction," and when the building is completed, the architect gives the owner a certificate certifying to the number of inspections made.

Earthquake Destruction in Chillan, Chile

Photos by Meigs Green

FOUR HUNDRED PEOPLE were buried under the wreckage of Chillan's municipal theater. Above is shown the structure's front and at right is the collapsed wood and corrugated-iron roof.



REINFORCED CONCRETE construction of this newly built Chillan church stood the test fairly well, although the dome lost some of its dignity.

A THREE-STORY FALL to the sidewalk was the lot of this stone coping. Such copings have caused loss of life in every major earthquake.

STREET SCENE in Chillan after the earthquake. The steel light pole in the foreground is said to have been bent by the force of the earthquake.

Pennsylvania Opposes Flood Control Program

(Continued from page 1)

In a statement defending the new Republican administration's action in halting the state flood control program, Stewart said that "the Commonwealth, in order to get federal aid, must surrender all rights and titles to land on so-called flood control land . . . That there may be no misunderstanding of my position on this question, I state that I am unwilling, regardless of cost, to surrender a single acre . . ."

Stewart said that expenditure of any money for a flood control program would increase the state deficit. Moreover, he said, although $5,00,000 has been available for several years, no projects are yet ready for actual work and continuance of the staff would, therefore, be wasteful.

Among those whose jobs were terminated by the halt in flood control work were G. Dale Dixon, flood control engineer; C. W. Ullom, head division engineer; Frederick H. Weed, head division office engineer; and four district engineers and their subordinates. Charles F. Ruff, advanced hydraulic engineer was transferred to the division of encroachments.

South Penn highway

Meanwhile, the Pennsylvania Turnpike Commission on Feb. 3 called for bids on two more jobs connected with the South Penn toll road. Statements made by Arthur H. James, the new Governor, have led to the belief that work on the toll road might be curtailed or halted (*ENR*, Jan. 26, 1939, p. 117).

When the bid call was announced, Governor James said that he was still undecided as to what he will do about the project but that he would reach a decision before the bids are opened Feb. 17.

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George Lewis Dies at 63, Moffat Tunnel Builder

George Lewis, former general manager of the Moffat Tunnel Commission of Colorado, died Feb. 5 at Denver at the age of 63. A practical mining, tunnel, and construction man, Lewis was noted for his invention of the Lewis Traveling Girder, developed at the Moffat Tunnel and credited with the successful driving of that bore through difficult ground. This device, consisting of two parallel 46-in. girders, 65 ft. long, was carried on rollers on the bench; it projected forward into the top heading and was cantilevered backward into the full heading (*ENR* June 11, 1925, p. 970 and Dec. 8, 1927, p. 933). Blocking from the girder supported the top timbers, enabling the bench excavation to be carried on free of plumb posts. A reversible belt conveyor between the two girders moved muck out of and timbers into the top heading.

Lewis was born in New York state and went to Colorado at an early age. For twelve years he was construction superintendent for the Portland Mine at Victor, and later supervised construction of the state office building. He was made general manager of the Moffat Tunnel Commission at the start of the tunnel project, and upon the resignation of R. H. Keays as chief engineer in 1925, took over that position. Since 1935 Mr. Lewis had been a member of the Colorado Industrial Commission.

Volcanoes Erupt After Chile Quake

Some modern concrete structures injured in last week's earthquake but most withstand shock

Continued though comparatively mild earthquakes and eruption of a number of volcanoes, some of them dormant for centuries, followed the disastrous shock which struck Chile Jan. 25. A moderate earthquake was felt Jan. 31 in the northern section of Chile, about 600 miles from the area affected by the main quake.

Some information as to the behavior of structures in the earthquake area is becoming available. Edwin W. James of the U. S. Bureau of Public Roads, who was in Santiago attending the Pan American highway conference, informs *Engineering News-Record* that modern-type masonry and reinforced concrete in general withstood the shock well but that considerable damage was done to brick curtain walls and to light roof framing, particularly where the heavy tiles common in that country were used. Serious damage was done to about 240 miles of railroad main line and branches, though the only railroad traversing the earthquake area had no important bridges. Considerable damage was done to highways, but the financial loss involved is small because the highways were unimproved.

Some small water systems were injured, James said, but the financial loss is not large. Suspended wire systems also suffered.

The total damage done by the earthquake is estimated by the Minister of the Interior at about $50,000,000.

An observer in Chillan, scene of some of the worst damage, reports to *Engineering News-Record* that there were no steel frame buildings in the city. The theatre which collapsed, killing 400 people, was of concrete frame construction with brick curtain walls and a wood and corrugated-iron roof. The reinforced concrete marquee and foyer collapsed; this was responsible for most of the deaths, since people in the theatre were crowding to the exit. The side walls stood up and the concrete balcony remained in place.

A nearly completed reinforced concrete church was little injured except that the concrete dome fell over sideways, as shown on the opposite page. The concrete dome of another church sheared completely off and dropped intact to the street.

The majority of the buildings in Chillan were of adobe brick construction, and these are reported to have been almost completely disintegrated by the earthquake.

MEETINGS

National Societies

Engineering Institute of Canada, annual meeting, Chateau Laurier, Ottawa, Feb. 14-15.

Association of Highway Officials of North Atlantic States, annual convention, Hotel Pennsylvania, New York City, Feb. 15-17.

Southwest Road Show and School, Coliseum, Wichita, Kan., Feb. 21–24.

American Society of Mechanical Engineers and Louisiana Engineering Society, Spring meeting, St. Charles Hotel, New Orleans, Feb. 23-25.

American Concrete Pipe Association, annual convention, Hotel St. Francis, San Francisco, Feb. 23-25.

The Asphalt Institute, twelfth national asphalt conference, Biltmore Hotel, Los Angeles, California, Feb. 27–March 3.

American Concrete Institute, annual convention, Roosevelt Hotel, New York City, Mar. 1-3.

Associated Equipment Distributors, annual convention, Sir Francis Drake Hotel, San Francisco, Mar. 4-6.

American Society for Testing Materials, committee week and regional meeting, Deshler-Wallick Hotel, Columbus, March 6-10.

American Society for Testing Materials, spring group meeting, Columbus, Ohio, Mar. 6-10.

Associated General Contractors of America, annual convention, Palace Hotel, San Francisco, Mar. 6-11.

National Equipment Distributors Association, annual convention, San Francisco, Mar. 6-11.

Western Association of State Highway Officials, annual convention, San Francisco, Mar. 6-11.

American Road Builders Association, national exhibit and road show, Civic Auditorium, San Francisco, Mar. 6-11.

American Railway Engineering Association, annual meeting, Palmer House, Chicago, March 14-16.

Regional and Local

American Water Works Association, section meetings: New York, Sagamore Hotel, Rochester, Mar. 30-31; Kentucky - Tennessee, Peabody Hotel, Memphis, Apr. 10-12; Canadian section, Royal York Hotel, Toronto, Apr. 12-14.

Iowa Engineering Society, annual meeting, Hotel Fort Des Moines, Des Moines, Feb. 15-16.

Southern Safety Conference, Robert E. Lee Hotel, Jackson, Miss., Feb. 16-17.

Louisiana Engineering Society, annual meeting, jointly with spring meeting of American Society of Mechanical Engineers, St. Charles Hotel, New Orleans, Feb. 23–25.

New Jersey Sewage Works Association, annual meeting, Stacy-Trent Hotel, Trenton, March 9-10

New York State Association of Highway Engineers, annual convention, Poughkeepsie Armory, Poughkeepsie, Mar. 9-11.

American Society of Civil Engineers, Mid-South Section, spring meeting, State College, Miss., Mar. 17.

Connecticut Society of Civil Engineers, annual meeting, Strathcona Hall, New Haven, March 21-22.

Maryland-Delaware Water and Sewerage Association, annual conference, Fort Cumberland Hotel, Cumberland, Md., May 4-5.

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License Examinations

Iowa: Examination for professional engineering, March 14–15, and for land surveying March 16 in Des Moines.

MEN AND JOBS

Fred R. Rauch, has been appointed assistant administrator of WPA in charge of the division of employment; he was formerly director of highways and conservation in the WPA engineering division. Before taking his Washington post, Rauch had been regional advisor on labor relations and regional engineer for WPA in the southern states, and earlier he had engaged in the general construction business as president of the Lehigh Construction Co. of Cincinnati. Rauch had his first connection with federal works activity in 1933 when he became district engineer of the old CWA in Kentucky. He returned to private business a year later, but in 1935 he became director of labor management for the WPA in Kentucky and has been connected with the agency since that time.

Chester M. Everett has closed his consulting offices in New York City. His records, plans and specifications have been turned over to Malcolm Pirnie, who was formerly associated with Everett in the firm of Hazen Everett and Pirnie. Everett will be available for consultation by special appointment through Pirnie.

Samuel W. Marshall, former chief engineer of the Pennsylvania highway department, has resigned that post and is devoting his full time to his job as chief engineer of the Pennsylvania Turnpike Commission. Marshall previously held both jobs.

Webster L. Benham has resigned his post as chief engineer for Oklahoma of the WPA. Benham has announced no plans for the immediate future.

William F. Cummings has been promoted to the post of chief engineer of the Boston & Maine R.R., the Maine Central R.R and the Portland Terminal Co., succeeding the late Asa H. Morrill. Cummings has been with the Boston & Maine since 1906 and became assistant chief engineer in 1928. He has been acting chief engineer since last December.

Ray Lindsay, for the past three years assistant to the chief engineer of the WPA in Oklahoma, has been appointed chief engineer.

Willard B. Converse has been appointed superintendent of construction for the Buffalo Sewer Authority, Buffalo, N. Y. He will supervise inspection on WPA projects sponsored by the authority.

Charles L. Motl has been appointed maintenance engineer in the Minnesota highway department, succeeding Loren L. Allen. Motl had been assistant maintenance engineer in the past but was not connected with the highway department during the Farmer-Labor administration.

E J. Miller, assistant bridge engineer in the Minnesota highway department, has been named bridge engineer. Miller, who has been connected with the department for eighteen years, assumes the post made vacant by the appointment of highway commissioner Hoffman.

J. A. Krug has been appointed chief power engineer for the TVA. He will direct and coordinate the activities of the power planning and the power operation department and will develop methods for the sale of power. Originally created in 1937 under the title of chief power economist, the position has not been filled until now. Since last February, Krug has been chief power planning engineer and will con-

tinue in that capacity for the time being. Before joining TVA, Krug worked for the Wisconsin Telephone Co., the Wisconsin Public Service Commission, the Federal Communications Commission, and the Public Service Commission of Kentucky.

CLARK H. ELDRIDGE bridge engineer of the Washington State highway department has been appointed bridge engineer in charge of the Narrows suspension bridge near Tacoma, work on which is being started by the Washington State Toll Bridge Authority.

H. E. BAILEY, manager of the Concrete Pipe Association of Oklahoma, has been appointed a member of the Oklahoma highway commission. Bailey is a graduate of the University of Tennessee and has worked on railroad and highway projects.

THOMAS L. DOYLE, division engineer at Columbus for the Pennsylvania R.R., has been made assistant to the general manager.

CLYDE C. HADDON has been appointed chief of the division of motor transport in the Ohio Highway Department. Several years ago Haddon was chief of the maintenance division, but recently he has not been connected with the department.

CHRIS J. SHERLOCK, JR., chief engineer of the Alabama state highway commission, has been made chairman of the commission.

WILLIAM W. HURLBUT, chief of distribution and operation for the Los Angeles Bureau of Water Works & Supplies, has been named to the newly created post of assistant chief engineer and general manager. Hurlbut has been with the bureau for thirty years.

VERNON S. MOON, chief engineer of the New York City Board of Estimate, has announced that he will retire May 1 after 36 years in the city service.

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War Department Approves Battery Tunnel

The New York City Tunnel Authority received, Feb. 3, a permit from the War Department for construction of a tunnel under the East River to connect the Battery in Manhattan with Brooklyn.

No definite plans are now under consideration for financing such a tunnel. The project was turned down by PWA last fall, and a recent suggestion by Chairman Moses of the Triborough Bridge Authority that a bridge be constructed instead of a tunnel, at a considerably lower cost, is being actively considered by city officials.

Harry W. Dennis Leaves California Edison

Harry W. Dennis has retired from his post as chief civil engineer of the Southern California Edison Co. after 30 years service with the Edison organization. Dennis has been nominated by the mayor of Los Angeles for appointment to the city's board of public works.

Dennis had been chief civil engineer since 1926. He joined the company in 1909 as a construction engineer and rose steadily through the engineering ranks in the company.

If the mayor's nominations are accepted by the city council, Dennis will be the only engineer on the board. Edward L. Taylor, architect, has also been nominated, but the other nominees are from outside the construction industry.

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Railway Seeks Right To Build Niagara Bridge

The International Railway Corp. of Buffalo has instituted suit in the U. S. District Court at Washington to compel the Secretary of War to approve the railway corporation's plan to rebuild its Falls View Bridge, wrecked last January by ice in the Niagara River. The railway contends that its authorization to build the original bridge, obtained from the State of New York and the Government of Canada prior to the passage of the Rivers and Harbors Act of 1899, gives it the right to rebuild.

At the same time, the Niagara Falls Bridge Commission, created last Spring by Congress, is continuing with its own plans to build a publicly owned bridge, across the Niagara River. A contract for test borings has been awarded.

WASHINGTON HIGHLIGHTS

Special reports by Paul Wooton

THE TVA INVESTIGATING committee was continued in existence until April 1, 1939, and an additional $25,000 was appropriated for it by vote of both houses last week. This will permit the committee to conclude the study of TVA which it began last summer and submit a detailed report to Congress. No additional hearings are contemplated.

FUNDS for the regular activities of the Tennessee Valley Authority during the coming fiscal year are contained in the Independent Officies Appropriation bill, now under consideration by the House of Representatives. As reported by the appropriations committee the bill carried $39,000,000 for TVA, plus the usual authorization to incur contract obligations amounting to not over $4,000,000. The sum of $12,503,000 is earmarked to continue work on the Gilbertsville Dam, just above the mouth of the Tennessee River, and $4,252,000 to start the Watts Bar Dam above Chattanooga.

DAVID E. LILIENTHAL has been made vice-chairman of the TVA board of directors by vote of the directors. H. A. Morgan is chairman, and former Senator James P. Pope is the third member.

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Nathan C. Grover Retires From Geological Survey

Nathan C. Grover, chief of the water resources branch of the Geological Survey, retired Jan. 31, terminating 32 years in the service of the survey. Grover reached the retirement age of 70 last January but was granted a year's exemption from retirement by the President.

In his capacity as chief of the water resources branch, Grover had charge of gaging of streams and rivers and determining the quantity, nature and availability of the nation's water supplies.

Grover has been chief of the branch since 1913. He graduated from the University of Maine in 1890 and from Massachusetts Institute of Technology in 1896, and a year later he received the degree of civil engineer from the University of Maine. For a period between 1907 and 1911 he was hydraulic, construction, and irrigation engineer for J. G. White & Co. of New York.

OBITUARY

WILLIAM H. SELLEW, for 27 years, prior to his retirement some years ago, consulting engineer for the Pennsylvania and New York Central railroads, died Jan. 29 at Ann Arbor, Mich., aged 83. From 1927 to 1933, Sellew was engineering director of the University of Michigan. He was the author of "Steel Rails" and "Railroad Management."

EDWARD R. KUPPER, 59, a construction engineer employed by the Construction Quartermaster at Fort Sam Houston in Texas was killed Jan. 18 when the skip of a concrete mixer struck him in the head.

EMIL SCHNABLE, who retired from his Chicago contracting business in 1934, died Jan. 24 at the age of 83 in Wilmette, Ill. Schnable graduated from Cornell in 1881 and after work on the engineering staffs of several railroads he became chief engineer of the Chicago, Fort Madison & Des Moines R. R., a post he held from 1893 to 1898. He then spent 20 years with the Sanitary District of Chicago as division engineer and in 1918 entered the contracting business as a partner, first in the firm of Gahan & Byrne, then with Page & Schnable, and later as Schnable & Quinn.

VINCENT HART, chief engineer of the Public Works Department of Madras, India, since 1934, died in Ireland Jan. 29 at the age of 57. Between 1930 and 1934 Hart was engineer on the construction of the Cauvery-Mettur Dam in India.

CHARLES W. MCINENLY, who retired in 1936 from his post as assistant division engineer for the New York City Board of Transportation, died in New York Feb. 1 at the age of 57. McInenly graduated from Cooper Union in 1904 and received his C.E. degree from Brooklyn Polytechnic Institute ten years later. He began his engineering career in 1905 on the staff of the former Rapid Transit Railroad Commission and was connected with New York City rapid transit throughout the rest of his life, successively with the Public Service Commission, the Transit Construction Commission and the Board of Transportation.

J. B. JENKINS, valuation engineer since 1913 for the Baltimore & Ohio R.R., died in Baltimore Feb. 1 at the age of 70. A graduate of Western University of Pennsylvania in 1888, Jenkins had his first connection with the B. & O. shortly after his graduation when he spent three years as assistant engineer and engineer of the real estate department. Then, until 1900, he was engaged on a variety of rapid transit, municipal, and other work and spent some time in private practice. He rejoined the B. & O. with the rank of assistant engineer. Except for two years as construction quartermaster in the Army during the war his service with the B. & O. had been continuous since that time.

JAMES W. OGIER, state engineer in Tennessee for the U. S. Bureau of Public Roads, died in Nashville Jan. 27 at the age of 63. Ogier formerly held a post in the Montgomery office of the bureau, and around 1910 he was for a number of years bridge engineer in the Baltimore engineering department.

JOHN D. MCBEATH, former city engineer of Moncton, New Brunswick, died there recently. McBeath was a graduate of the University of New Brunswick.

W. GEORGE ELLIOTT, retired Boston civil engineer, died there Jan. 23 at the age of 65.

CONTRACTS AND CAPITAL

ENGINEERING construction awards for the week, $41,534,000, are 30 per cent below last week, and 24 per cent below the volume for the corresponding 1938 week.

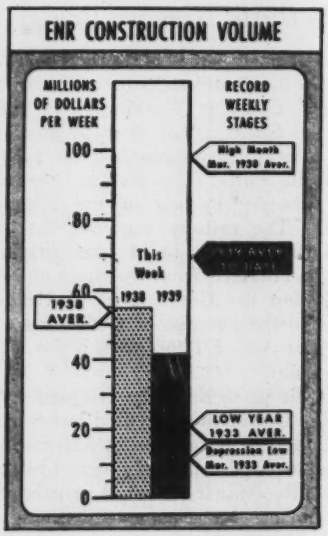
Construction award volume for the six weeks of 1939 totals $412,263,000, a 30.5 per cent gain over the $315,825,000 reported for the corresponding period last year.

Public construction for the week is 26 per cent below the previous week, but 25 per cent above the 1938 week. Private awards are 39 and 63 per cent lower, respectively, than a week ago and a year ago.

In the classified construction groups, bridges, industrial buildings, and public buildings record gains over a week ago. Waterworks, sewerage, bridges, public buildings, streets and roads, and unclassified construction are above their respective totals for the 1938 week.

New capital for construction purposes for the week totals $44,713,000, a decrease of 19 per cent from the 1938 week. The current week's volume is made up of $37,120,000 in state and municipal bonds and $7,593,000 in REA loans. The New York City sale of $30,800,000 in stocks and bonds for water supply, school building, rapid transit and docks, is responsible for the high state and municipal total.

New construction financing for the year to date, $124,468,000, is 18 per cent higher than for the six-week period last year.



CONTRACTS

(Thousands of dollars)

	Week Ending Feb. 10 1938	Feb. 2 1939	Feb. 9 1939
Federal	$5,600	$3,072	$2,209
State & Municipal	18,675	37,791	28,179
Total public	$24,275	$40,863	$30,388
Total private	30,556	18,173	11,146
TOTALS	$54,831	$59,036	$41,534
Cumulative 1939 (6 weeks)			$412,263
Cumulative 1938 (6 weeks)			$315,825

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1938 6 Wk.	1939 6 Wk.
NON-FEDERAL	$105,647	$124,468
Corporate securities	61,230	18,645
State & Mun. bonds	41,175	90,192
R.E.A. loans	.....	15,631
R.F.C. loans	2,101	.....
PWA allotments	1,141	.....
FEDERAL	.....	.....
TOTAL CAPITAL	$105,647	$124,468

FHA MORTGAGES

	Week Ending Feb. 5 1938	Jan. 28 1939	Feb. 4 1939
Selected for appraisal	$8,572	$19,725	$19,784*
Cumulative 1939 (5 weeks)			$87,935*
Cumulative 1938 (6 weeks)			$41,881

* Subject to revision.

ENR INDEX NUMBERS

Index Base		1913	1926
Construction Cost	Feb.	234.31	112.63
Building Cost	Feb.	196.23	106.08
Volume	Jan.	287	126